



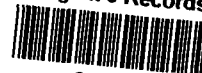
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

000005

EPA Region 5 Records Ctr.



235095

REPLY TO THE ATTENTION OF:

HS-6J

MEMORANDUM

DATE: SEP 21 1993

SUBJECT: ACTION MEMORANDUM - Request for a Time Critical Removal
Action at the Mark Twain Industries Site, West
Frankfort, Franklin County, Illinois

FROM: Thomas Bloom, On-Scene Coordinator
Emergency Response Section II *TB*

TO: Jodi L. Traub, Acting Associate Division Director
Office of Superfund

THRU: Richard Karl, Acting Chief *R. Karl*
Emergency and Enforcement Response Branch

Site ID# ZE

I. PURPOSE

The purpose of this memorandum is to obtain your approval to expend up to \$208,870 to conduct a time critical removal action at the Mark Twain Industries Site, in West Frankfort, Franklin County, Illinois. The objective of the proposed removal action is to mitigate threats to public health and the environment by disposing of approximately 100 containers (with capacity 15 gallons or less) and approximately 175 55-gallon drums of paint wastes, acetones, glues, solvents, and flammables at the Mark Twain Industries (MTI) site in West Frankfort, IL. The project will require approximately twenty-one on-site working days to complete. The facility is not on the National Priorities List.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID# - ILD042665877

Mark Twain Industries is located in an industrial park in West Frankfort, IL. The Mark Twain manufacturing plant consists of two warehouse-type buildings which are used to form and assemble

pleasure boats. Currently, the smaller building is used to store boat molds and equipment. In the smaller building, located in three rooms and one equipment bay are approximately 100 containers (with capacity 15 gallons or less) and approximately 175 55-gallon drums (see figure 2). Several of the drums are deteriorated and in an unsafe condition (bulging). Many drums have flammable liquids and one drum is known to contain toluene diisocyanate (TDI), a water reactive waste. Access to the building and containers is unrestricted and the threat of fire or explosion exists.

From 1980 until 1990 Mark Twain Industries operated a pleasure boat manufacturing facility. The manufacturing process of fiber glass molding, foam generation, carpentry, upholstering, and painting were employed. Acetone, which was used to clean air guns, was the primary waste generated. In addition, waste paints, glues, solvents and other flammable liquids were generated. Sometime in late 1990 Mark Twain Industries ceased operation, and materials and wastes were left behind.

The Illinois Environmental Protection Agency (IEPA), referred the Mark Twain Industries site to the United States Environmental Protection Agency (U.S. EPA) Emergency and Enforcement Response Branch (EERB) in a memo dated July 27, 1993. EERB conducted a site assessment on September 1, 1993. Information from the Site assessment can be found in Section III.

Currently, the property is leased to Crown Line Boats, Inc.. Crown Line Boats Inc. manufactures pleasure boats employing a process similar to the one described above. Employees of Crown line Boats Inc. work in and around the small warehouse. According to David McKenzie, Safety Director, personnel are informed to use caution and are instructed not to move materials and wastes which are located in the three rooms and one equipment bay of the small warehouse.

III. THREAT TO PUBLIC, OR WELFARE, OR THE ENVIRONMENT

Conditions at the MTI site present an imminent and substantial endangerment to human health and the environment, based upon factors set forth in paragraph (b) (2) of Part 300.415 of the National Contingency Plan (NCP). The following conditions exist at the MTI site:

- * Actual or potential exposure to nearby populations, animals, or the food chain from hazardous substances, pollutants, or contaminants.

The site is located in a mixed residential and commercial area in West Frankfort, Illinois. The site is located in a warehouse within the property of Crown Line Boats, Inc., and is secured by their fence during non-business hours. During the business hours of Crown Line Boats, Inc., the fence is unlocked and vehicular or pedestrian access is not restricted.

Analytical results indicate the presence of acetone (F003) at concentrations of up to 260,000 micrograms/g and styrene at up to 43,000,000 µg/L in drum samples. In addition, 2-butanone (methyl ethyl ketone [D035]), lead (D008), and chromium (D007) have been detected in drum samples at concentrations as high as 170,000,000 µg/L, 2,300 mg/kg, and 940 mg/kg, respectively. Inhalation is the most important route of exposure for styrene, acetone, and 2-butanone (methyl ethyl ketone). Symptoms of inhalation of these substances include nose, throat, and serious eye irritation; headaches; dizziness; confusion; nausea; and vomiting. Ingestion of 2-butanone in laboratory animals has caused problems with the nervous system and in some cases caused death. Ingestion of acetone has caused comas, kidney damage, and metabolic changes. Ingestion of lead produces a damaging effect on the organs or tissues with which it comes in contact. Dermal contact with either of the contaminants causes skin inflammation. In addition, chromium is a known carcinogen, and styrene and lead are suspected carcinogens.

- * Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.**

Approximately 175 55-gallon drums and 100 containers of 15-gallon capacity or less containers exist in the warehouse building. Access to both the site and the building is unrestricted during the day, allowing unauthorized access to the drums and containers stored at the site. Contaminants and/or products within the containers could be ignited, inhaled, or come in contact with the human population.

- * Threat of fire or explosion.**

Acetone and 2-butanone are highly flammable liquids. Acetone is a hazard due to its propensity for fire and explosion and can react vigorously with oxidizing materials. Styrene is a fire hazard when exposed to flame, heat, or oxidants. Styrene is explosive in the form of vapor when exposed to heat or flame, and reacts with oxygen at temperatures above 40°C to form a heat-sensitive explosive peroxide. Toluene diisocyanate (TDI), is a hazard due to its propensity for fire and explosion when reactant with water.

Access to the site and a number of containers is unrestricted, and the contaminants and/or products within the containers could be ignited. In the event of a fire at this site, toxic fumes and hazardous particulate matter from burning material may be emitted from the facility and endanger adjacent commercial and residential areas.

IV. ENDANGERMENT DETERMINATION

In 40 CFR 261.21(a)(1) a liquid waste exhibits the characteristic of ignitability if it has flash point less than 60° C. 40 CFR 261.23(a)(3) states that a waste exhibits the characteristic of reactivity if it forms a potentially explosive mixture with water. Due to the continuing deterioration of the facility, the containers of flammable and water reactive wastes in the warehouse building, the nearby population described in sections II and III above, and the unrestricted access to the facility, this site, if not addressed by implementing the response actions selected in this Action Memorandum, will present an imminent and substantial endangerment to the public and the environment.

V. PROPOSED ACTION AND ESTIMATED COSTS

The purpose of this removal action is to mitigate the imminent and substantial threats posed to public health, or welfare, or the environment. Removal activities at the site are to include:

1. Development and implementation of a site health and safety plan.
2. Hazard categorization (hazcatting) of materials in each container and separation of drums into appropriate hazardous waste streams.
3. Removal and disposal of all existing containers and propane tanks, along with their products, in compliance with the U.S. EPA off-site disposal policy.

All applicable or relevant and appropriate requirements (ARARS) of federal law will be complied with to the extent practicable. A letter has been sent to the Illinois Environmental Protection Agency requesting that it identify state ARARS. Any state ARARS identified in a timely manner for this removal action will be complied with to the extent practicable.

The On-Scene Coordinator has begun planning for provision of post-removal site control, consistent with the provisions of Section 300.415 (k) of the NCP.

The detailed Emergency Response Cleanup Service (ERCS) contractor cost breakdown is presented in Attachment I, with the estimated projected costs summarized as follows:

EXTRAMURAL COSTS:

| | |
|---------------------------------------|--------------|
| ERCS | \$114,401.87 |
| ERCS Contingency (20%) | \$ 22,880.37 |
| Subtotal | \$137,282.24 |
| Total TAT, including multiplier costs | \$ 27,890.66 |
| Extramural Subtotal | \$165,172.90 |
| Extramural Contingency (15%) | \$ 24,775.94 |
| TOTAL, EXTRAMURAL COSTS: | \$189,948.84 |

INTRAMURAL COSTS:

| | |
|---|--------------|
| U.S. EPA Direct Costs \$30/hr x (210 Regional + 21 HQ hours) | \$ 7,791.00 |
| U.S. EPA Indirect Costs \$53/hr x (210 Regional hours) | \$ 11,130.00 |
| TOTAL, INTRAMURAL COSTS | \$ 18,921.00 |
| TOTAL REMOVAL PROJECT CEILING ESTIMATE | \$208,869.84 |

It is estimated that the removal will be completed in 21 working days, with the exception of possible disposal delays.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the facility which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

VI. CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED

Due to the unrestricted access to the facility and the presence of containers containing paint wastes, glues, acetones, TDI, and flammable products, delayed action may result in the exposure of hazardous substances potentially endangering public health, or welfare, or the environment.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues for the MTI site.

VIII. ENFORCEMENT

For administrative purposes, information concerning confidential enforcement strategy for this site is contained in the Enforcement Confidential Addendum.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Mark Twain Industries site, West Frankfort, Illinois, developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the site. Conditions at the site meet the NCP section 300.415 (b) (2) criteria for a removal and I recommend your approval of the proposed removal action. The total project ceiling, if approved, will be \$208,870. Of this, an estimated \$162,058.18 may be used for cleanup contractor costs. You may indicate your decision by signing below:

APPROVE:



ACTING ASSOCIATE DIVISION DIRECTOR
OFFICE OF SUPERFUND

DATE:

9/21/93

DISAPPROVE:

ACTING ASSOCIATE DIVISION DIRECTOR
OFFICE OF SUPERFUND

DATE: _____

Attachments:

- A. Detailed Cleanup Contractor Cost Estimate
- B. Enforcement Confidential Addendum
- C. Index to the Administrative Record
- D. Maps
- E. Summary Report

cc: T. Johnson, OS-210
Sheila Huff, U.S. Department of the Interior
230 South Dearborn St., Room 3422
Chicago, Illinois 60604
J. Jansen, IEPA Superfund Coordinator

bcc: A. Baumann, HSRL-5J
R. Powers/R. Buckley, HSE-GI
R. Karl, HSE-5J
J. Cisneros, HSE-5J
D. Bruce, HSE-5J
L. Fabinski, ATSDR, HSRL-5J
O. Warnsley, CRU, HSRLT-5J
T. Lesser, P-19J
D. Crume, MF-10J
EERB Site File (Char Gwizdala, SF Central File Room)
EERB Read File (M.Johnson)
EERB Delivery Order File (C.Brasher)
M. Duffer, Contracting Officer, MC-10J
Thomas Bloom, On-Scene Coordinator
Thomas Turner, Attorney, ORC
Peggy Schwekbe, Enforcement Specialist

ATTACHMENT A

DETAILED CLEANUP CONTRACTOR COST ESTIMATE

The estimated cleanup contractor costs are as follow:

| | |
|----------------------|-----------|
| Contractor Personnel | \$ 45,384 |
| Contractor Equipment | \$ 10,107 |
| Subcontractor Cost | \$ 2,508 |
| Unit Rate Material | \$ 13,664 |
| Waste Disposal | \$ 39,449 |
| Waste Transportation | \$ 3,292 |
| | <hr/> |
| TOTAL* | \$115,000 |

* Rounded to the nearest thousand.

ATTACHMENT B

ENFORCEMENT CONFIDENTIAL ADDENDUM

Redacted-information not relevant to the selection of the removal action.

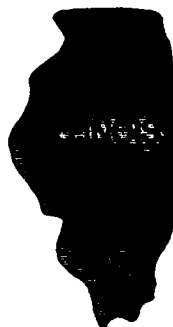
ATTACHMENT C

ADMINISTRATIVE RECORD
FOR
MARK TWAIN INDUSTRIES

WEST FRANKFORT, ILLINOIS

September 21, 1993

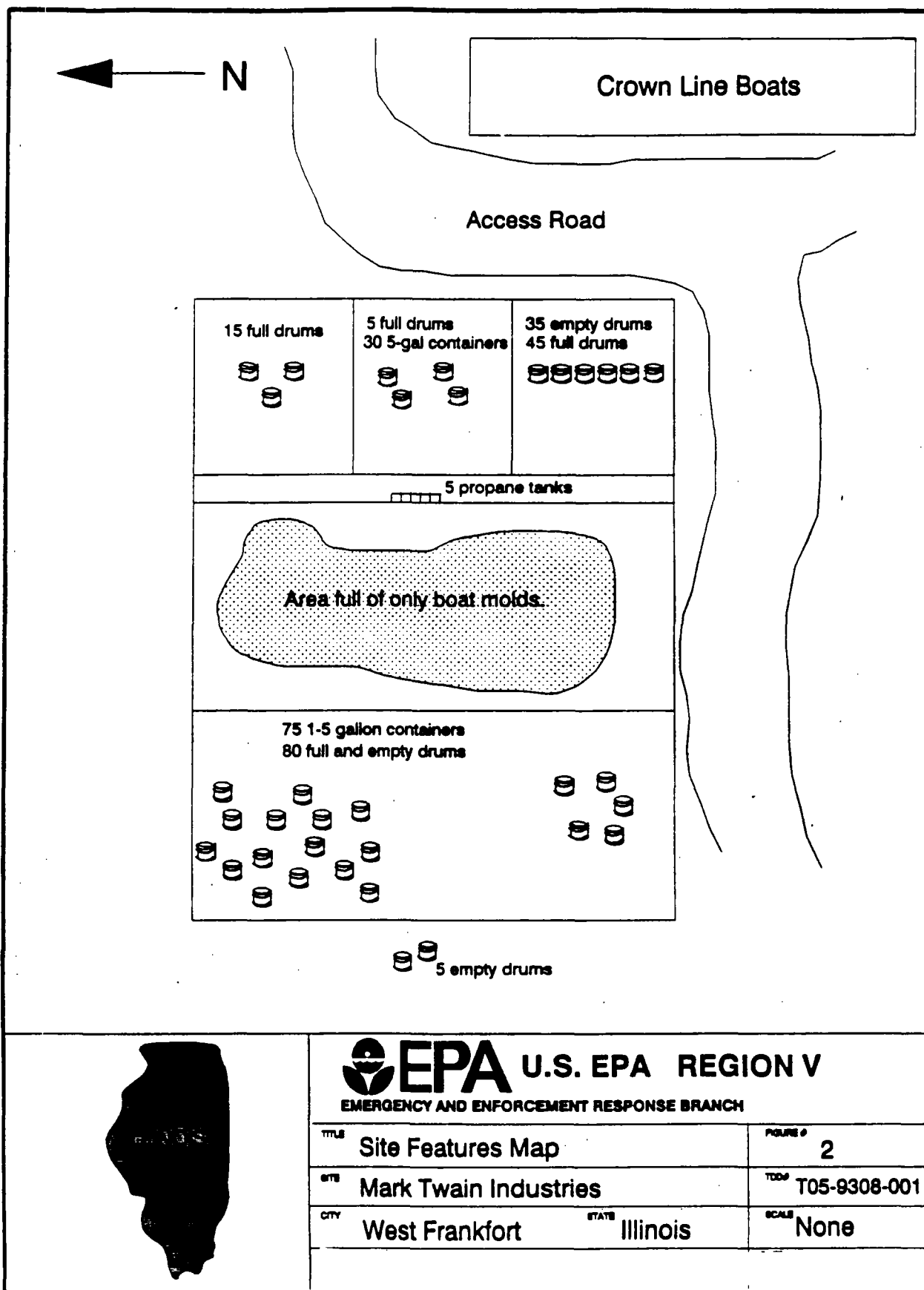
| <u>DATE</u> | <u>AUTHOR</u> | <u>RECIPIENT</u> | <u>TITLE/DESCRIPTION</u> | <u>PAGES</u> |
|-------------|--|---------------------------------------|---|--------------|
| 07/08/91 | IEPA, CLP | IEPA | Various Analytical Sampling & Results | 256 |
| 07/27/93 | O'Hara, R., IEPA | Bruce, D. U.S. EPA | Letter re: IEPA's Site Referral to the U.S. EPA | 3 |
| 09/08/93 | Keeley, K., Great Lakes Analytical | Ripp, M., Ecology & Environment | Laboratory Analysis for Flash Point, Closed Cup (F) | 25 |
| 00/00/00 | Ecology & Environment | U.S. EPA | Site Assessment Pending | |
| 00/00/00 | Bloom, T., U.S. EPA | Traub, J., U.S. EPA | Action Memorandum (Pending) | |



EPA U.S. EPA REGION V

EMERGENCY AND ENFORCEMENT RESPONSE BRANCH

| | | | |
|-------|-----------------------|----------|--------------|
| TITLE | Site Location Map | FIGURE # | 1 |
| SITE | Mark Twain Industries | TOP | T05-9308-001 |
| CITY | West Frankfort | STATE | Illinois |
| | | SCALE | None |



EPA U.S. EPA REGION V
EMERGENCY AND ENFORCEMENT RESPONSE BRANCH

| | | | |
|-------|-----------------------|----------|--------------|
| TITLE | Site Features Map | FIGURE # | 2 |
| SITE | Mark Twain Industries | TD# | T05-9308-001 |
| CITY | West Frankfort | STATE | Illinois |
| | | SCALE | None |

Summary Report

Page: 1

Initial Cost Projection Scenario: MARK TWAIN

Projection ID Number: EIL0803S

Date: 09/02/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: E & E, INC.

Cost Projection Summary

| | |
|-----------------------------|------------|
| Contractor Personnel | 45,383.88 |
| Contractor Equipment | 10,106.11 |
| Unit Rate Materials | 13,663.38 |
| At Cost Materials | 0.00 |
| Subcontractors | 2,508.00 |
| Waste Transportation | 3,291.75 |
| Waste Disposal | 39,448.75 |
| Cleanup Contractor Subtotal | 114,401.87 |
| Federal and State Agencies | 0.00 |
| Extramural Subtotal | 114,401.87 |
| 20 % Extramural Contingency | 22,880.37 |
| Extramural Subtotal | 137,282.24 |
| TAT Personnel | 19,980.66 |
| TAT Special Projects | 7,910.00 |
| TAT Analytical Services | 0.00 |
| Total TAT Costs | 27,890.66 |
| Other Cost Items | 0.00 |
| Extramural Subtotal | 165,172.90 |
| 15 % Project Contingency | 24,775.94 |
| Total Extramural Cost | 189,948.84 |
| EPA Regional Personnel | 7,791.00 |
| EPA Non-Regional Personnel | 0.00 |
| EPA Headquarters Direct | 0.00 |
| (0 % of Regional Hours) | |
| EPA Indirect | 11,130.00 |
| EPA Total | 18,921.00 |
| Project Total | 208,869.84 |

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Summary Report (cont.)
Initial Cost Projection Scenario: MARK TWAIN

Page: 2

Projection ID Number: EIL0803S

Date: 09/02/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: E & E, INC.

=====

Project Scope

=====

| Number | Step/Milestone | Estimated Duration | Cost |
|--------|--------------------|-----------------------|------------|
| ----- | ----- | ----- | ----- |
| 000 | GENERAL SITE COSTS | 21 Days | 208,869.84 |
| | | | ----- |
| | | | 208,869.84 |

Detailed Report By Category
Initial Cost Projection Scenario: MARK TWAIN

Page: 1

Projection ID Number: EIL0803S

Date: 09/02/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: E & E, INC.

Cost Projection Detail - By Category

Contractor Personnel

| Job Category | Number of Employees | Number of Days | Hrs per Day | Labor | PD, Lodge Travel | Total Charge |
|--------------|---------------------|----------------|-------------|-------|------------------|--------------|
|--------------|---------------------|----------------|-------------|-------|------------------|--------------|

000 - GENERAL SITE COSTS

Redacted-information not relevant to the selection of the removal action.

Total personnel cost: 45,383.88

Contractor Equipment

| Equipment Name | Number Needed | Reg Days | Hours /day | Stby Days | Mob/Demob Days | Decon Days | Mileage | Total Charge |
|----------------|---------------|----------|------------|-----------|----------------|------------|---------|--------------|
|----------------|---------------|----------|------------|-----------|----------------|------------|---------|--------------|

000 - GENERAL SITE COSTS

| | | | | | | | | |
|-----------------------------|---|----|-------|---|---|---|-----|----------|
| 10910-Car-Passenger | 1 | 21 | 10.00 | 2 | 2 | 1 | N/A | 1,139.78 |
| 13610-Pickup-2 wheel drive | 2 | 21 | 10.00 | 2 | 2 | 1 | N/A | 1,669.50 |
| 22020-Decon-8x25 | 1 | 21 | 10.00 | 2 | 2 | 1 | N/A | 603.58 |
| 33510-Forklift-Small | 1 | 21 | 10.00 | 2 | 2 | 1 | N/A | 3,973.38 |
| 34531-Grapppler-Drum/Hydrau | 1 | 21 | 10.00 | 2 | 2 | 1 | N/A | 235.38 |
| 51520-Radio-Portable Base | 1 | 21 | 10.00 | 2 | 2 | 1 | N/A | 116.73 |
| 72320-Computer-Portable PC | 1 | 21 | 10.00 | 2 | 2 | 1 | N/A | 321.83 |
| 75105-Generator-5 KW | 1 | 21 | 10.00 | 2 | 2 | 1 | N/A | 600.78 |
| 76730-Lighting-Light Plant | 1 | 21 | 10.00 | 2 | 2 | 1 | N/A | 771.75 |
| 79020-Steam Jenny- | 1 | 21 | 10.00 | 2 | 2 | 1 | N/A | 502.25 |
| 81220-Centrifugal-2 inch | 1 | 21 | 10.00 | 2 | 2 | 1 | N/A | 171.15 |

Total for GENERAL SITE COSTS : 10,106.11

Total equipment cost: 10,106.11

Unit Rate Materials

| Material Name | Material Use | Unit Cost | Number of Units | Total Charge |
|---------------|--------------|-----------|-----------------|--------------|
|---------------|--------------|-----------|-----------------|--------------|

000 - GENERAL SITE COSTS

| | | | | |
|--------|------|-------|-----------|-------|
| DIESEL | FUEL | 1.000 | 75.0 GAL. | 78.38 |
|--------|------|-------|-----------|-------|

Detailed Report By Category (cont.)
Initial Cost Projection Scenario: MARK TWAIN

Page: 2

Projection ID Number: EIL0803S

Date: 09/02/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: E & E, INC.

Unit Rate Materials

| Material Name | Material Use | Unit Cost | Number of Units | Total Charge |
|---------------------------------|--------------|-----------|-----------------|--------------|
| GASOLINE | FUEL | 1.250 | 200.0 GAL. | 261.25 |
| OVERPACKS | DRUMS | 50.000 | 150.0 EACH | 7,837.50 |
| PPE | H & S | 75.000 | 70.0 EACH | 5,486.25 |
| Total for GENERAL SITE COSTS : | | | | 13,663.38 |
| Total unit rate materials cost: | | | | 13,663.38 |

At Cost Materials

0.00

Subcontractors

| Subcontractor | Service | Billing | Total Charge | |
|--------------------------------|-------------------|------------|--------------|----------|
| 000 - GENERAL SITE COSTS | | | | |
| | LODGING FOR WORKR | 0.0 DAYS | 0.00 | |
| | PER DIEM CHARGES | 0.0 DAYS | 0.00 | |
| WISCONSIN BELL | PHONE SERVICE | 2.0 MONTHS | 627.00 | |
| WISCONSIN PORT-O-JON | PORT BATHROOM REN | 2.0 MONTHS | 627.00 | |
| WISCONSIN EDISON | ELECTRIC SERVICE | 2.0 MONTHS | 209.00 | |
| | SITE WATCHMAN | 2.0 MONTHS | 1,045.00 | |
| Total for GENERAL SITE COSTS : | | | | 2,508.00 |
| Total subcontractor cost: | | | | 2,508.00 |

Waste Transportation

| Waste Type | Amount | Loads | Cost Per Mile | Miles | Total Charge | |
|--------------------------------|--------|-------|---------------|-------|--------------|----------|
| 000 - GENERAL SITE COSTS | | | | | | |
| HAZ. WASTE | 150 | 3 | 3.00 | 350 | 3,291.75 | |
| Total for GENERAL SITE COSTS : | | | | | | 3,291.75 |
| Total transportation cost: | | | | | | 3,291.75 |

Waste Disposal

| Waste Type | Disposal Method | Units | No. of Units | Unit Cost | Total Charge |
|--------------------------|-----------------|-------|--------------|-----------|--------------|
| 000 - GENERAL SITE COSTS | | | | | |
| FLAMM LIQ | FUELS BLEND | DRUM | 40 | 100.00 | 4,180.00 |

Detailed Report By Category (cont.)
Initial Cost Projection Scenario: MARK TWAIN

Page: 3

Projection ID Number: EIL0803S

Date: 09/02/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: E & E, INC.

Waste Disposal

| Waste Type | Disposal Method | Units | No. of Units | Unit Cost | Total Charge |
|-------------|-----------------|-------|-----------------|--------------|-----------------|
| FLAMM SOLID | FUELS BLEND | DRUM | 40 | 275.00 | 11,495.00 |
| HAZ SOLID | INCINERATION | DRUM | 70 | 325.00 | 23,773.75 |

Total for GENERAL SITE COSTS : 39,448.75

Total disposal cost: 39,448.75

Federal and State Agencies

0.00

20 % Extramural Contingency: 22,880.37

TAT Personnel

| Level | Number of Days | Hrs per Day | Hourly Rate | Labor | PD, Lodge Travel | Total Charge |
|-------|-------------------|----------------|----------------|-------|---------------------|-----------------|
|-------|-------------------|----------------|----------------|-------|---------------------|-----------------|

000 - GENERAL SITE COSTS

Redacted-information not relevant to the selection of the removal action.

Total TAT personnel cost: 19,980.66

TAT Special Projects

| Description | Total Charge |
|--------------------------|-----------------|
| 000 - GENERAL SITE COSTS | |
| REPORTS, ETC. | 7,910.00 |

Total for GENERAL SITE COSTS : 7,910.00

Total TAT special project cost: 7,910.00

TAT Analytical Services

0.00

Other Costs

0.00

15 % Project Contingency: 24,775.94

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Detailed Report By Category (cont.)
Initial Cost Projection Scenario: MARK TWAIN

Page: 4.

Projection ID Number: EIL0803S

Date: 09/02/93

Cleanup Contractor: RESS - Riedel Environmental

TAT Contractor: E & E, INC.

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EPA Regional Personnel

| Title | Number of Days | Hrs per Day | Hourly Rate | Labor | PD, Lodge Travel | Total Charge |
|-------|-------------------|----------------|----------------|-------|---------------------|-----------------|
|-------|-------------------|----------------|----------------|-------|---------------------|-----------------|

000 - GENERAL SITE COSTS

Redacted-information not relevant to the selection of the removal action.

Total EPA Regional Personnel Cost: 7,791.00

EPA Headquarters Cost: 0.00
(0 % of Regional hours)

EPA Indirect Cost: 11,130.00
(210 hours @ \$53.00 per hour)

EPA Non-Regional Personnel 0.00

Total EPA Cost: 7,791.00

Total site cost: 197,739.84